CLAIMS:

1. A method of capturing an image using an ultrasound system, comprising:

surveying the image to collect motion data;

analyzing the motion data to identify a flow in the image; and

scanning a limited region of the image containing the flow with a flow imaging technique.

2. The method of claim 1, wherein surveying step comprises the step of collecting a sample of color flow data.

3. The method of claim 2, wherein surveying step comprises the step of collecting contour data.

4. The method of claim 1, wherein the analyzing step generates a motion map that identifies flow and non-flow regions.

5. The method of claim 1, wherein the flow imaging technique includes a technique selected from the group consisting of: color flow, time domain correlation, speckle tracking, strain imaging, pulse wave Doppler, and continuous wave Doppler.

6. The method of claim 1, wherein the flow is associated with a valve in a heart.

7. The method of claim 1, wherein the flow indicates a blood vessel.

8. The method of claim 1, wherein the scanning step uses multi-line beamforming.

9. The method of claim 1, wherein the flow is periodically tracked and the limited region of the image containing the flow is automatically adjusted.

10. The method of claim 1, wherein the limited region for acquisition is a region selected from the group consisting of a 3D pie slice, a cube, an arbitrary shape, and a collection of shapes.

11. The method of claim 1, wherein the scanning step includes adjusting a set of acquisition parameters selected from the group consisting of b-mode line densities, colorflow line densities, pulse repetition frequency, and ensemble length.

12. An ultrasound system, comprising:

a survey system for collecting motion data from a target image;

a segmentation system for mapping a region of flow within the image based on the motion data; and

a flow acquisition system that automatically limits the collection of flow image data within the image to the region of flow.

13. The ultrasound system of claim 12, wherein the motion data comprises color flow data.

14. The ultrasound system of claim 13, wherein the motion data comprises contour data.

15. The ultrasound system of claim 12, wherein the flow acquisition system collects data using an imaging technique selected from the group consisting of: color flow, time domain correlation, speckle tracking, strain imaging, pulse wave Doppler, and continuous wave Doppler.

16. The ultrasound system of claim 12, wherein the flow acquisition system uses multi-line beamforming.

17. The ultrasound system of claim 12, wherein the region of flow is periodically tracked and automatically adjusted.

18. The ultrasound system of claim 12, wherein region of flow is a region selected from the group consisting of a 3D pie slice, a cube, an arbitrary shape, and a collection of shapes.

19. The ultrasound system of claim 12, wherein the flow acquisition system includes a set of acquisition parameters selected from the group consisting of: b-mode line densities, colorflow line densities, pulse repetition frequency, and ensemble length.

20. An ultrasound system that includes a segmentation tool for segmenting an image into a flow and a non-flow region, comprising:

a system for performing a survey of the image, wherein the survey collects a sample of motion data; and

a system that analyzes the sample of motion data to separately identify the flow region and the non-flow region within the image.

21. The ultrasound system of claim 20, further comprising a control system that automatically acquires image data from the flow region using a flow image technique.

22. The ultrasound system of claim 21, wherein the flow image technique is selected from the group consisting of: color flow, time domain correlation, speckle tracking, strain imaging, pulse wave Doppler, and continuous wave Doppler.

23. The ultrasound system of claim 21, wherein the control system includes:

a system for automatically setting a focal zone position based on a location of the flow region; and

a system for automatically setting an image depth based upon the location of a peak motion signal within the flow region.

24. The ultrasound system of claim 21, wherein the non-flow region is captured using grayscale data.

25. The ultrasound system of claim 20, further comprising a system that distinguishes plaque from clutter within a selected region by analyzing low level echoes and an amount of flow at the selected region.

26. The ultrasound system of claim 25, further comprising a system that automatically reduces an imaging gain at the selected region based on the detection of clutter.

27. The ultrasound system of claim 25, further comprising a system that automatically increases an imaging gain at the selected region based on the detection of plaque.

28. A program product stored on a recordable medium for optimizing ultrasound data, comprising:

means for receiving survey data representative of motion in a volume of ultrasound data;

means for mapping the survey data into a motion map that indicates flow and non-flow regions; and

means for limiting the collection of flow data to the flow regions.

29. The program product of claim 28, including further means for collecting grayscale data interspersed with flow data.

30. The program product of claim 28, wherein the collection of flow data is achieved with a technique selected from the group consisting of: color flow, time domain correlation, speckle tracking, strain imaging, pulse wave Doppler, and continuous wave Doppler.

31. An ultrasound method for performing a retrospective analysis, comprising:

surveying an image to identify a point of interest;

obtaining an acquisition volume of spectral Doppler data from the image, wherein the acquisition volume includes at least one sample volume encompassing the point of interest;

saving the spectral Doppler data from the acquisition volume, wherein the spectral Doppler data includes phase information; and

retrospectively analyzing the saved spectral Doppler data.

32. The method of claim 31, wherein the acquisition volume is obtained using a spectral Doppler technique selected from the group consisting of: pulse wave Doppler and continuous wave Doppler.

33. The method of claim 31, wherein the image is surveyed using color flow data.

34. The method of claim 31, wherein the image is surveyed using contour data.

35. The method of claim 31, wherein the acquisition volume is obtained using multi-line beamforming.